ELECTRIC REBAR CUTTER

HANDING INSTRUCTIONS

RC-16 RC-20 NRC-20
RC-22 RC-25 RC-32

CE

Read this instructions carefully before attempting to use cutters. Ignorance of proper operating procedure can lead to accidents. If in doubt about any procedure, contact your nearest authorized agent.

Contents

General Safety Precautions

Usage

Use rebar cutters on concrete re-forcing bars only.

Restrict use to designated materials

There is always a chance that the cut end may shoot out, especially if less than 30cm in length. Exceeding designated material specifications greatly increases this risk and will also damage the tool. Do not attempt to cut rebars. Harder, thicker or thinner than those specified.

Use eye protection
Wear safety goggles , safety glassed with side shields or a face shield when using cutter.

Provide safety barriers
Erect safety screens to protect co-workers from possible flying ends. Place safety screen under the rebar when working in high places.

Exercise proper control
Hold cutter firmly and maintain proper footing and balance. Do not over-reach when working in high place , secure cutter to scaffolding with a safety rope. Check that power cord is not fouled and keep cord away from sharp edges and heat. Check that all adjusting wrenches have been removed before using cutter.

Guard Against electric shock
To avoid possible electric shock, do not handle cutter with wet hands or use cutter in the rain or damp places. Be aware of all power lines, electric circuits and other hazards that may be contacted , especially those that are below the surface or otherwise hidden from view .

Unplug tool
Disconnect cutter from outlet when not in use and before cleaning, adjusting or servicing. Do not disconnect plug from outlet by pulling the cord. Always check that the switch lock if OFF before plugging in.

Beware of environment
Do not use cutter in the presence of flammable materials (e.g. Paint, thinner,petroleum products, adhesives).
Do not use cutter in a possibly lighted and clear of obstructions. Operator should at all times have an unobstructed view of the cutter, rebar and surrounding area.
Wear proper apparel

Do not wear loose clothes, dangling objects or jewellery. Restrain long hair. The use of a safety-helmet and rubber soled boots is recommended . If safety gloves are worn, be especially careful that gloves does not get caught in moving parts.

Keep visitors aways

Keep all visitors at a safe distance from the work area for their own protection and to prevent distraction of the operator.

Maintain cutter with care

Inspect cutter before each application. Faulty or loose cutter blocks could result in personal injury . Keep handle dry, clean and free from oil and/or grease. Keep housing and piston free of dirt and iron filings. Check that no screws or bolts are loose or missing. Following instruction for maintenance . Inspect switch, cord,plug and any extension cable at regular intervals.

Store carefully

When not in use, store cutter and accessories in dry place where they can't be accessed by unauthorized person.

Main parameters.

Model	RC-16	RC-20	NRC-20	RC-22	RC-25	RC-32
Voltage ± 5%	110V/230V AC only	110V/230V AC only	110V/230V AC only	110V/230V AC only	110V/230V AC only	110V/230V AC only
Wattage	850 W/900W	1250W/950W	1350W/950W	1350W/1000W	1700W/1600W	2400W/2200W
Net weight	8 KGS	13 KGS	12.5 KGS	15 KGS	24.5 KGS	31 KGS
Gross weight	13 KGS	18.3 KGS	17 KGS	21.5 KGS	32 KGS	40 KGS
Cutting speed	2.5-3.0 s	3.0--3.5 s	3.0--3.5 s	3.5--4.5 s	5--5.5s	6--7s
Max rebar diameter	¢16mm	¢20mm	¢20mm	¢22mm	¢25mm	¢32mm
Min rebar diameter	¢4mm	¢4mm	¢4mm	¢4mm	¢4mm	¢6mm
Machine size	460*270*115mm	410*115*220mm	500*130*140mm	420*120*230mm	480*150*255mm	520*170*270mm
Packing size	510*230*150mm	480*195*280mm	575*280*165mm	485*190*330mm	565*230*345mm	630*240*350mm

Operating Instructions

! Caution : Indicates hazard that could result in minor personal injury and/or product damage.

Care :Indicates hazard that will result in product damage.

Pre-use checks

1. Check oil level.
2. Check condition of cutter blocks and tightness of cutter block bolts.

! Caution : Using loose or cracked cutter blocks may result in injury to operators as well as damage to unit.

3. Check that the power source is appropriate for the cutter.

Care : If voltage is too high , the motor will burn out. If the voltage is too low, insufficient power will be generated. Never use DC current.

4. Check that power supply is properly earthed.

! Caution : Failure to earth power supply may result in electric shock to operator.

5. Check that cord is undamaged and that plug is not loose.

! Caution : Cut or abraded covering could result in a short and electric shock to operator.

If an extension cable is to be used, make sure that it is undamaged and that it is the proper thickness for the length.

Cable size / Cable length	110V	230V
	AWG	Normalization size
Up to 10 m	16	1.0 mm2
Up to 15 m	14	1.25 mm2
Up to 30 m	10	1.5 mm2

Warm-up

Stopper adjustment

The adjustable stopper function to maintain the rebar in tIn cold weather , warm up unit for 30-60 seconds so that the hydraulic oil reaches the proper viscosity. Pull trigger -switch to extend piston and release when it has reached its full stroke, Repeat

15-20 times.

he correct position during cutting and must be properly set for each size of rebar before making a cut.

1. Screw in stopper to provide sufficient clearance for rebar.

2. Insert rebar fully into U-shaped support. Make sure that rebar is resting on the base of the stopper.

3. Keeping rebar at right angels (90°) to front cutter block, screw out stopper until it is just touching the rebar. Once set, the stooper needs no further adjustment while cutting rebar of the same diameter, but must be re-set for a different size rebar.

! Caution: Failure to correctly set the stopper will result in excessive wear of cutter block and may cause cut end to fly out.

Cutting

1. Insert rebar between stopper and front cutter block, making sure that it is properly seated in U-shaped support.

2. Pull trigger -switch and keep depressed while piston advances and rebar is cut. (If switch is released at an intermediate point, piston will stop.)

3. When cut is completed, release switch. Piston retracts automatically. (Note that switch can't be re-activated until piston has fully retracted.)

Points of attention

1. Be especially careful when cutting off short lengths (30cm or less) as the cut end tends to fly out.

! Caution : Flying ends are a hazard to all personnel in the vicinity. Erect safety screens.

2. Do not cover air vents.

Care : If events are covered , motor will overheat and may burn out.

3. If hydraulic oil exceeds 70 ° (158 F) in temperature, power will drop.

Allow until to cool before resuming operation. (Be particularly careful in summer, when the aluminum pump case heats up quicker.)

4. If a drop in power is observed and motor is unusually hot, check carbon brush .

5. If piston should ever fail to retract completely, push rear cutter block backwards to manually retract piton.

! Caution: Use a rebar or flat metal bar for this purpose. Never push cutter block with any part of the hand, even if gloved.

Once piston has been retracted , pull trigger-switch long enough to partially advance piston. Unplug unit. And check piston and housing for accumulated dust iron filings that may be jamming the piston. After cleaning, piston still does not automatically retract when fully extended, the piston itself may be damaged. Return the unit to an authorized agent for repair.

Maintenance

Cutter blocks

Before using, always check that the two bolts on each cutter block are properly tightened. Using a loose block will result in damage to block and housing. Also check condition of cutter blocks. If either cutting edge is dull or chipped, remove retaining bolts and rotate both blocks so that two new edges come into use. Replace and tighten bolts (each block has four cutting edges)

When all four cutting edges have been used or if either block is cracked or otherwise damaged, replace both block.

! Caution : A loose or cracked block may result in injury to operator .

Cleaning

Cleaning cutter after use.

! Caution : Wear gloves to protect hands from metal splinters. Do not use an air-gun, blasting with air can cause metal filing and/or dust to get into eyes and respiratory system.

1. Disconnect unit.
2. Wipe or brush away all dirt and metal filings. Pay particular attention to the lower half of the piston, where dirt is more easily accumulated.

Oil-level check

As the cutters are hydraulically operated, the oil level must be checked at frequent intervals, preferably every day. Failure to maintain the oil at the proper level results in a drop in pressure and loss of cutting power.

! Caution : Hydraulic oil is highly flammable. Keep away from sparks and naked flame. Do not smoke.

! Caution : Hydraulic oil may cause inflammation of the eyes and skin. If ingested, it will cause diarrhoea and vomiting.

In case of eye contact, rinse in clean water for at least 15 minutes and consult a physician. In case of skin contact, wash thoroughly with soap and water.

In case of ingestion, consult a physician immediately. Do not deliberately induce vomiting.

1. Oil should be warm but not hot. Warm up unit if cold.
2. Adjust stopper and make three or four cuts, noting exactly at what point the rebar is actually breaking.
3. Pinch a short piece of rebar, stopping just before it breaks off. Unplug unit from power source.
4. With partially severed rebar in place, turn unit over so that oil-plug is uppermost. (If unit is hot, allow to cool down.)
5. Remove oil-plug and seal-washer (packing)

! Caution : Never remove oil-plug when unit is hot or oil will spurt out.

6. check that oil is level with bottom of plug hole. (i.e. That pump case is full to the brim). If oil level is too low, top up with 20-weight hydraulic oil with anti-foam and anti-abrasion properties. (ISO viscosity grade VG46. E.g. Shell oil tellus 46, mobil oil DTE-25 OR Esso uni power SQ46.)
7. After topping up, extract air from system. Gently tilt cutter lengthwise and return it to a level position. Top up again and tilt in the opposite direction . Repeat this process

until all air has been extracted.

Care: Cutter can't function properly if oil contains air bubbles.

8. Replace seal washer (packing) and plug. Connect cutter to power source and completely serve rebar.

Oil change

The hydraulic oil should be changed at least once a year. Sooner if it appears dirty.

1. Unplug unit from power source. Remove oil plug and packing. Turn cutter over and drain oil into a suitable receptacle. When oil ceases to drain out, tilt unit to rear so that oil trapped in the piston housing can run out. When housing is empty, tilt unit in the opposite direction to empty the residue in the pump case.

2. With drain-hole uppermost, slowly fill the unit with fresh oil. Replace plug and lightly tighten. Connect unit to power source and advance piston two or three times. Unplug unit and remove oil-plug . Top up oil level and replace plug.

3. Finally follow procedure for oil level check.

Note: Dispose of hydraulic oil in accordance with local regulations. Do not pour into the sea, river, lake or drains.

Bolt tightness

Once a week or after every 500 cuts, check the tightness of all bolts, especially those securing the housing to the cylinder. Loose bolts will result in a loss of power.

Carbon brushes

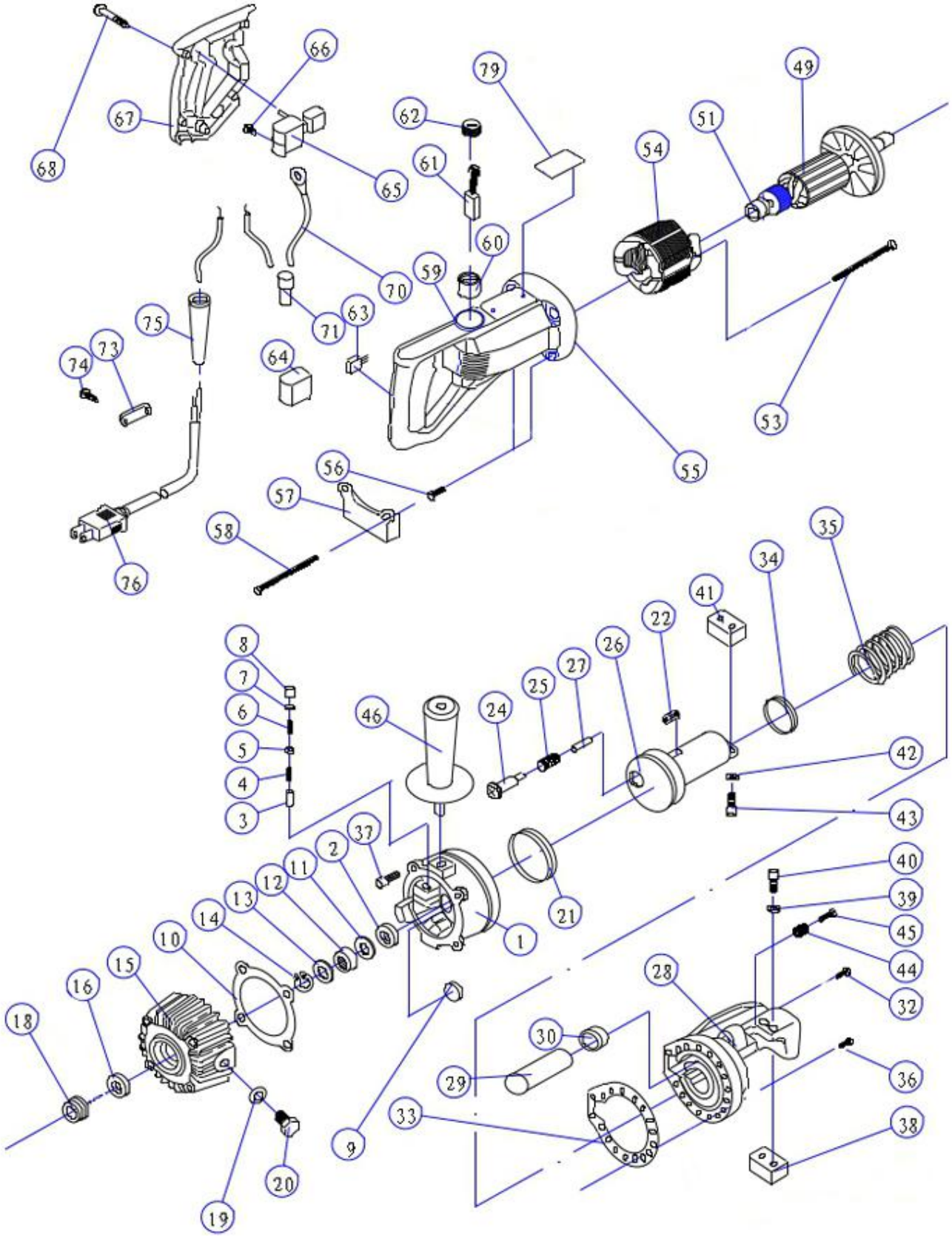
Inspect the two carbon brushes at least once every two months. (normal brush life is 200 hours.)

Care: Worn brushes will result in power loss, cause the motor to run hot and irreparably damage the armature's commutator.

1. Disconnect unit
2. Unscrew both brush caps and pull out carbon brushes.
3. Replace brushes if less than 6 cm in length.

RC-16 NRC-20

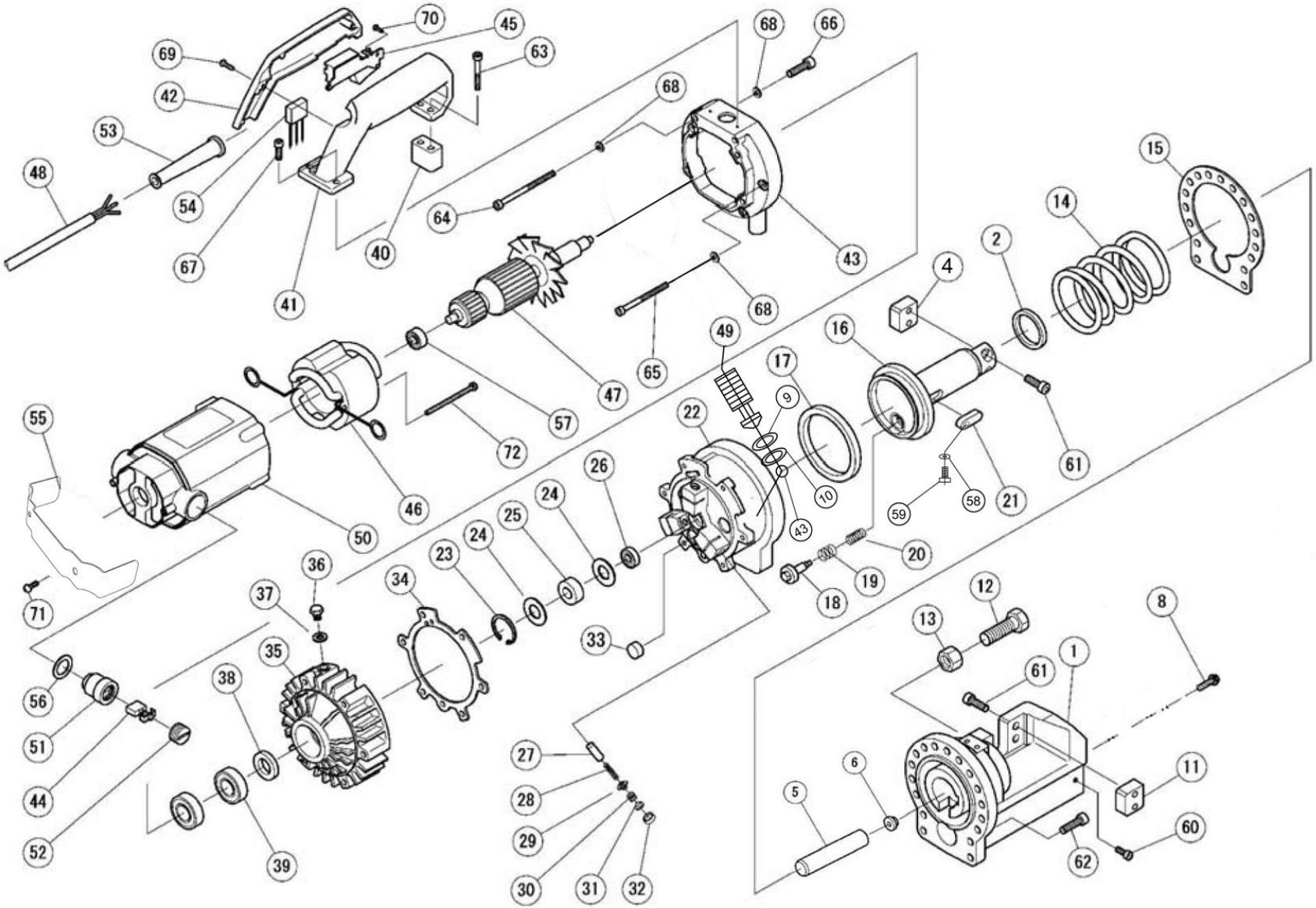
Portable Rebar Cutter Parts List



RC-16　NRC-20　PARTS LIST

NO.	PARTS NAME		NO.	PARTS NAME
1	CYLINDER		40	hexagon socket screw M5 x 18
2	BALL BEARING 698		41	CUTTER BLOCK / BLADE
3	PISTON		42	SPRING WASHER　Φ5
4	RETURN SPRING		43	hexagon socket screw　M5×16
5	OIL VALVE		44	SPRING
6	VALVE　SPRING		45	hex socket screw M10x40
7	SPRING GUIDE		46	HANDLE
8	PUMP SEAL		47	**
9	MAGNET FILTER		48	**
10	GASKET		49	ARMATURE
11	MANGANESE STEEL GASKET		50	**
12	NEEDLE BEARING 12×24×10		51	BEARING　608
13	MANGANESE STEEL GASKET		52	**
14	SNAP RING		53	TAPPING SCREW M4×60
15	SNAP RING		54	STATOR COIL
16	PUMP CASE OIL SEAL 15×25×7		55	MOTOR HOUSING
17	**		56	LOCATING SLEEVE
18	BEARING　6002		57	FOOT STAND
19	COMPOUND GASKET　Φ10		58	hexagon socket screw M5×85
20	HEXAGONAL BOLT M10×16		59	hexagon socket set screw M4×5
21	GASKET RING　70×60×6		60	BRUSH HOLDER
22	PIN　　8×25		61	CARBON BRUSH
23	**		62	BRUSH CAP
24	RETURN ROD		63	CONDENSER
25	SPRING		64	CONDENSER COVER
26	CUTTER ROD		65	SWITCH
27	SPRING		66	RUBBER PUSH BUTTON
28	CUTTER HEAD		67	HOUSING COVER
29	AIR BAG		68	TAPPING SCREW M4x20
30	NUT		69	**
31	**		70	**
32	SCREW		71	SAFETY CAP
33	GASKET		72	**
34	SEAL 40*30*6		73	CORD HOLDER
35	BIG SPRING		74	TAPING SCREW M4x14
36	hexagon socket screw　M6 x 20		75	CORD ARMOR
37	hexagon socket screw　M6 x 20		76	ELECTRICAL CORD
38	CUTTER BLOCK / BLADE		77	**
39	PRING WASHER M5		78	**
			79	NAME PLATE

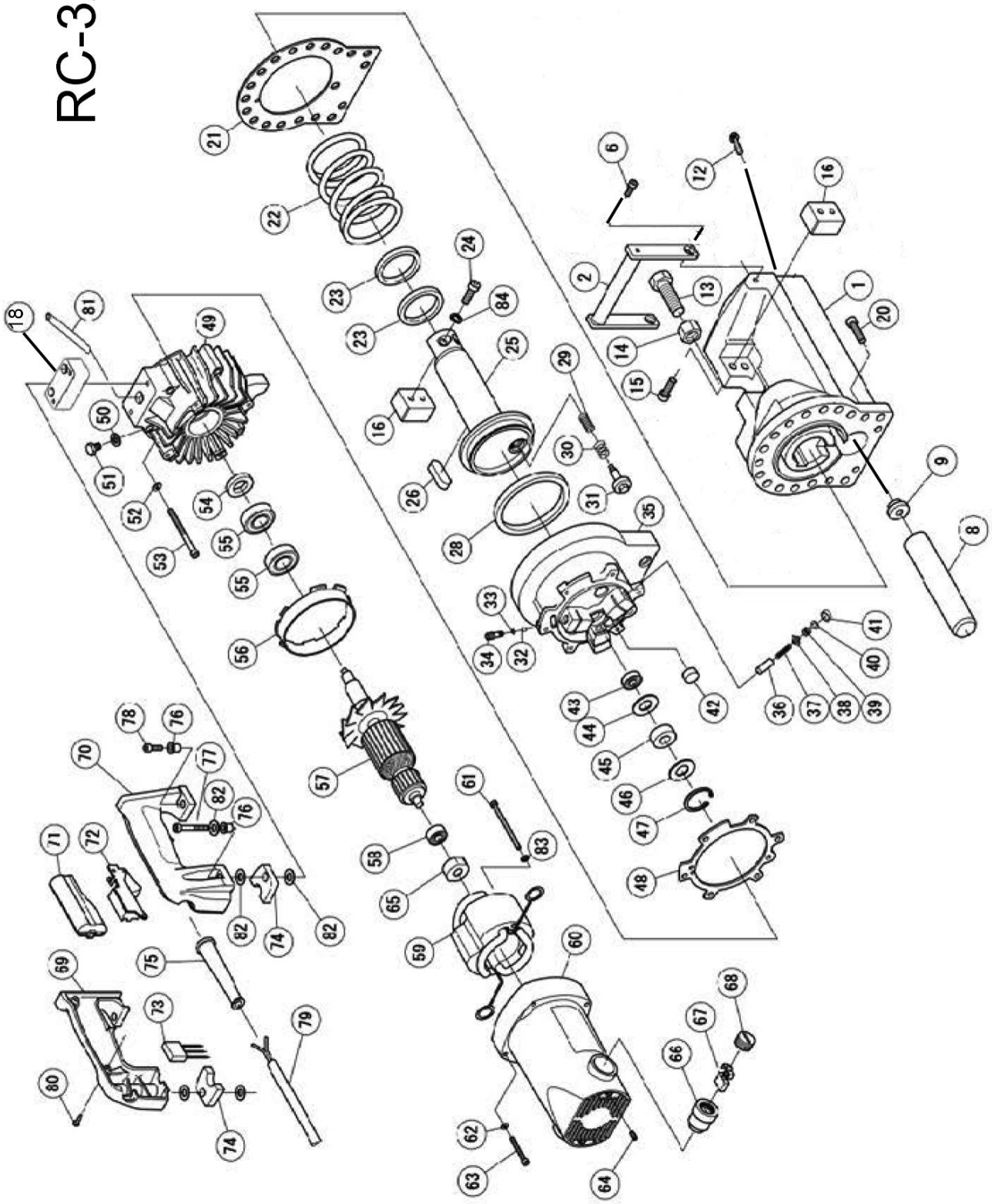
RC-20, RC-22, RC-25
Portable Rebar Cutter Parts List



RC-20 RC-22 RC-25 PARTS LIST

NO.	PARTS NAME		NO.	PARTS NAME
1	CUTTER HEAD		40	CONNECTING BLOCK
2	GASKET RING 40×50×6		41	HANDLE
3	**		42	HANDLE COVER
4	CUTTER BLOCK / BLADE		43	PHOTOSPHERE Φ4.763
5	AIR BAG		44	CARBON BRUSH
6	NUT		45	SWITCH
7	**		46	STATOR COIL
8	SCREW		47	ARMATURE
9	O RING		48	ELECTRICAL CORD
10	O RING		49	BOLT
11	CUTTER BLOCK / BLADE		50	MOTOR HOUSING
12	HEXAGONAL SCREW		51	CARBON BRUSH HOLDER
13	NUT		52	CARBON BRUSH CAP
14	BIG SPRING		53	CABLE ARMOR
15	GASKET		54	**
16	CUTTER ROD		55	**
17	GASKET RING 80×95×9		56	GUM WASHER
18	RETURN SHAFT		57	BEARING 6200
19	SPRING		58	WAVE WASHER
20	SPRING		59	BOLT M4*8
21	PIN 12×40		60	BOLT M8*25
22	CYLINDER		61	BOLT M8*30
23	SNAP RING		62	BOLT M8*30
24	MANGANESE STEEL GASKET		63	BOLT M6*20
25	NEEDLE BEARING 14×30×12		64	BOLT M6*20
26	BEARING 609		65	BOLT M6*25
27	PISTON		66	BOLT M6*50
28	SPRING		67	BOLT M6*20
29	OIL VALVE		68	WASHER
30	SPRING		69	BOLT M4*12
31	SPRING GUIDE		70	BOLT M4*8
32	OIL SEAL		71	**
33	FILTER MAGNET		72	BOLT M5*75
34	GASKET		73	CONNECTING PLATE
35	PUMP CASE			
36	HEXAGONAL SCREW M10×16			
37	COMPOUND GASKET Φ10			
38	OIL SEAL 20×35×8			
39	BEARING 104			

RC-32



RC-32 PARTS LIST

NO.	PARTS NAME		NO.	MAGNET FILTER
1	HOUSING		42	BEARING 609
2	SUB HANDLE		43	BEARING GUIDE
3			44	NEEDLE BEARING
4			45	BEARING GUIDE
5			46	SNAP RING
6	CAP BOLT M8X16		47	PUMP CASE PACKING
7	**		48	PUMP CASE
8	AIG BAG		49	SEAL WASHER
9	TIGHT NUT		50	CAP BOLT M10X16
10			51	SEAL WASHER
11			52	CAP BOLTM6X50
12	NUT		53	OIL SEAL 20X35X8
13	BOLT M16X40		54	BEARING 6004
14	NUT M16		55	FAN COVER
15	CAP BOLT M8X30		56	ARMATURE
16	CUTTER BLOCK		57	BEARING 6200
17			58	STATOR COIL
18			59	MOTOR HOUSING
19			60	TAPPING SCREW
20	CAP BOLT M10X40		61	P.WASHER M6
21	CYLINDER PACKING		62	CAP BOLT M6X25
22	RETURN SPRING		63	CAP BOLT M5X16
23	SEAL 45X55X6		64	**
24	CAP BOLT M8X25		65	BRUSH HOLDER
25	CUTTER ROD		66	CARBON BRUSH
26	PIN 12X40		67	BRUSH CAP
27			68	HANDLE COVER
28	SEAL 85X100X9		69	HANDLE
29	RETURN SPRING UP		70	SWITCH SUPPORT
30	RETURN SPRING DOWN		71	SWITCH
31	RETURN VALVE		72	**
32	STEEL BALL		73	HANDLE STAY
33	O RING		74	CORD ARMOR
34	RELEASE VALVE		75	P.WASHER M6
35	CYLINDER		76	CAP BOLT M6X35
36	PISTON		77	CAP BOLT M6X35
37	SPRING		78	CORD
38	DELIVERY VALVE		79	TAPPING SCREW M5X16
39	SPRING		80	TAPPING SCREW M5X30
40	SPRING GUIDE		81	P.WASHER M6
41	PUMP HEAD SEAL		82	MAGNET FILTER

NOTE:

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